

THERMA TRU[®]
PATIODOORSYSTEMS

Therma-Tru[®]
Fiber-Classic[®]
and
Smooth-Star[®]
Sliding Patio
Door System

Double Unit
Assembly & Installation

Read all instructions before starting.

The applicable standards for these products are governed by
the International Residential Code.
Copies of performance ratings and testing are available on our website
www.thermatru.com and our product manual.

The following packages are needed to complete the installation of your *Therma-Tru*[®] Sliding Patio Door System. **Check all components for correct size and color.**

Frame Kit

- 1-Head Jamb
- 2-Side Jambs
- 1-Sill
- 1-Active Interlock
- 1-Inactive Interlock
- 1-Panel Bumper
- 12-#10 x 3" Flat Head Screws
- 12-#8 x 3" Pan Head Screws
- 1- This Instruction Booklet
- 2- Anchor Blocks
- 2- #10 x 1 1/2" Pan Head Screws
- 2- #10 x 2 1/2" Pan Head Screws
- 1-Sill Cap Base
- 1-Sill Cap Top
- 1-Drip Cap
- 1-Head Sealing Fin
- 2-Corner Pads
- 1-Foot Bolt
- 1-Foot Bolt Keeper
- 1-#8 x 1 1/2" S.S. Pan Head Screw
- 2-#8 x 1" S.S. Pan Head Screws
- 2-Active Panel Hole Plug
- 3-#8 x 9/16" Pan Head Screw
- 1-Jamb Cover
- Touch Up Paint

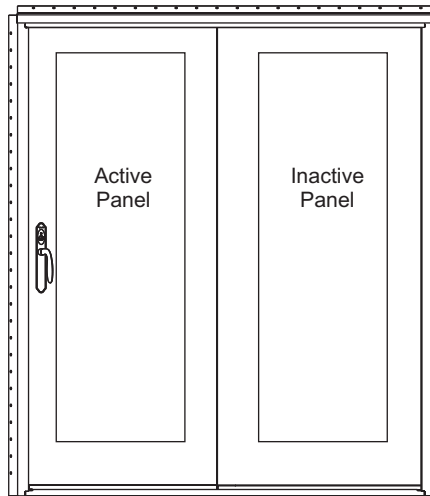
Handle Set Kit

- 2-Handles
- 1-Exterior Backplate
- 1-Interior Backplate
- 2-Keys
- 2-Handle Screws
- 3-Phillips Head Machine Screws
- 1-Allen Wrench
- 2-Backplate Gaskets

1-Screen (sold separately)

1-Active Panel

1-Inactive Panel



Additional Parts

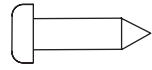
- Strike Plate
- 7 - #8 Flat Head Screws

Tools and materials needed for assembly and installation:

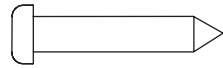
- 100% Silicone Sealant and Caulk Gun
- 6' Level
- Measuring Tape
- Electric Drill
- #2 Phillips Drive Bit
- Staple Gun or Brad Nails
- 1/8" Drill Bit
- Phillips Head Screwdriver
- Gloves
- Safety Glasses
- Partial roll of Insulation
- Shims
- Rubber Mallet

Note: Due to ongoing product development, Therma-Tru Corp. reserves the right to make changes in design, materials, and specifications without notice.

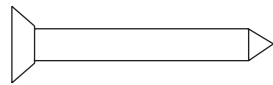
SCREW CHART



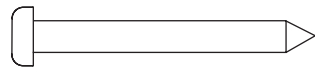
#8 x 9/16" S.S. Pan Head Screw



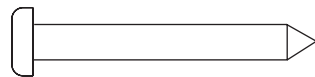
#8 x 1" S.S. Pan Head Screw



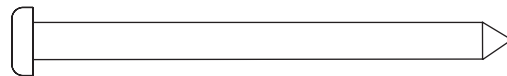
#8 x 1 3/8" Flat Head Screw



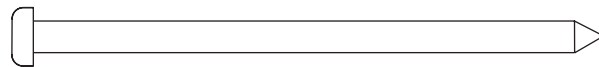
#8 x 1 1/2" S.S. Pan Head Screw



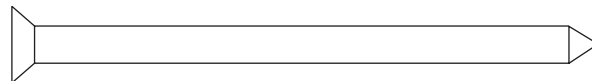
#10 x 1 1/2" Pan Head Screw



#10 x 2 1/2" Pan Head Screw



#8 x 3" Pan Head Screw



#10 x 3" Flat Head Screw

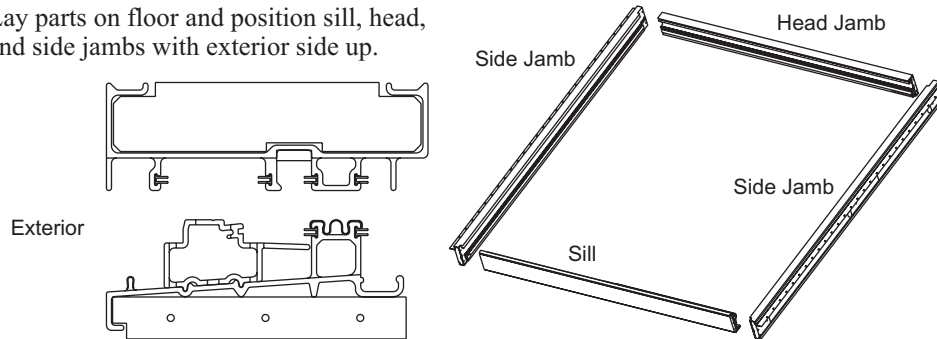


NOTE: *Frame Assembly*

A large work area is needed to assemble the frame kit. Cover area with cardboard from one or more door panel cartons to protect frame parts and floor.

1 LAY FRAME COMPONENTS ONTO WORK AREA

Lay parts on floor and position sill, head, and side jambs with exterior side up.



2 IF APPLICABLE, INSTALL TOP-HUNG SCREEN TRACK

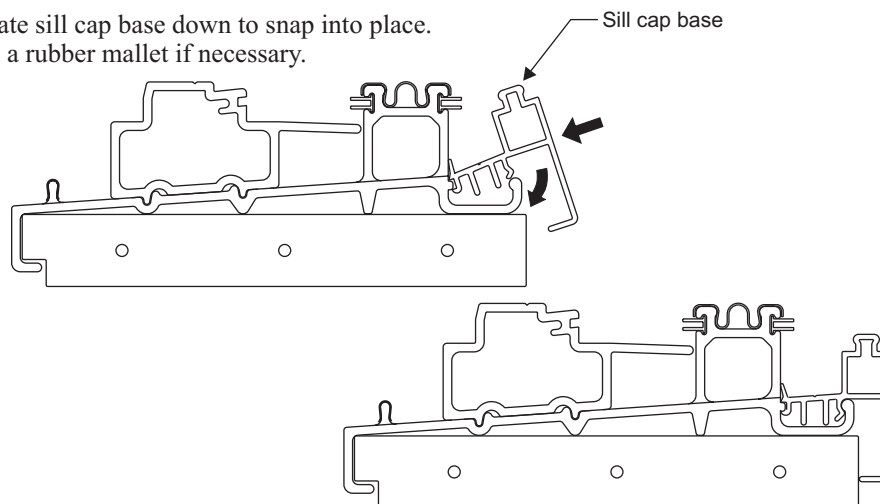
For units using the wide profile top-hung screens, install top-hung screen track and adapter into head jamb prior to assembly.

Reference steps 1 thru 4 of the “Wide Profile” Screen Installation - Sliding Patio instructions, included with the top-hung screen, for complete details.

3 INSTALL SILL CAP BASE

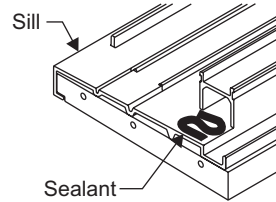
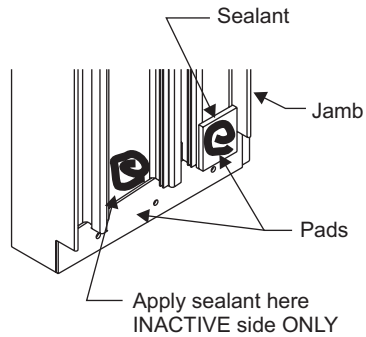
Engage groove in sill cap base with sill.

Rotate sill cap base down to snap into place. Use a rubber mallet if necessary.



4 ATTACH SILL TO JAMBS

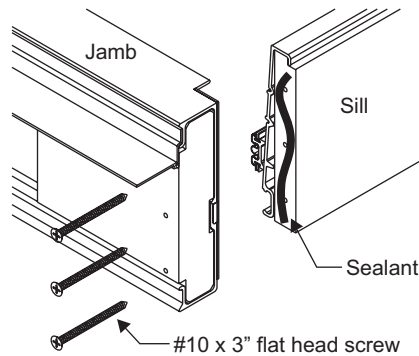
NOTE: Be sure that foam pads are in place before assembling frame.



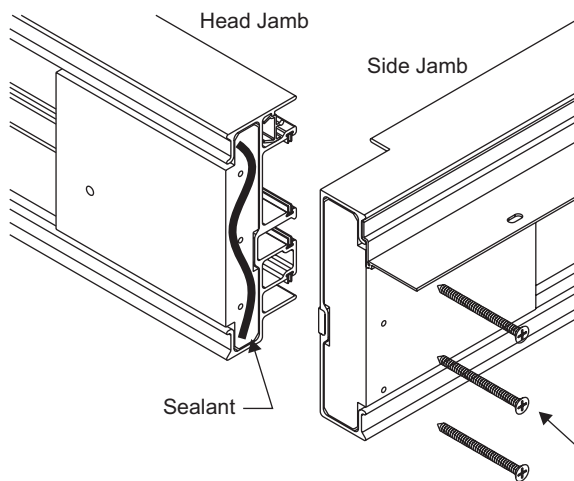
Apply sealant to sill and side jambs as shown.

Fasten side jambs to sill through pre-drilled holes using (3) #10 x 3" flat head screws. (Starting with center screw is recommended.)

Repeat of opposite side.



5 ATTACH HEAD TO JAMBS



Apply sealant to end of head jamb.

Fasten side jambs to head jamb through pre-drilled holes using (3) #10 x 3" flat head screws. (Starting with center screw is recommended.)

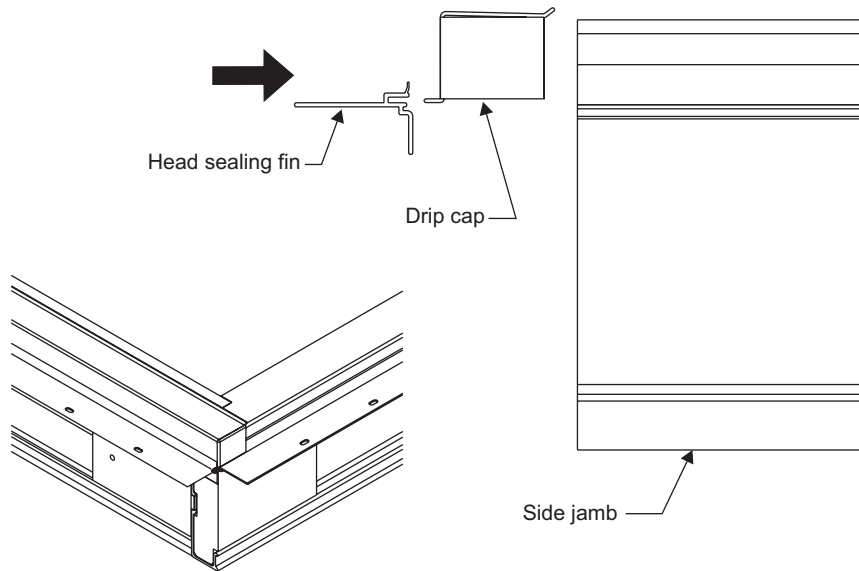
Repeat for opposite side.

6 DRIP CAP INSTALLATION

Place drip cap on top of head jamb.

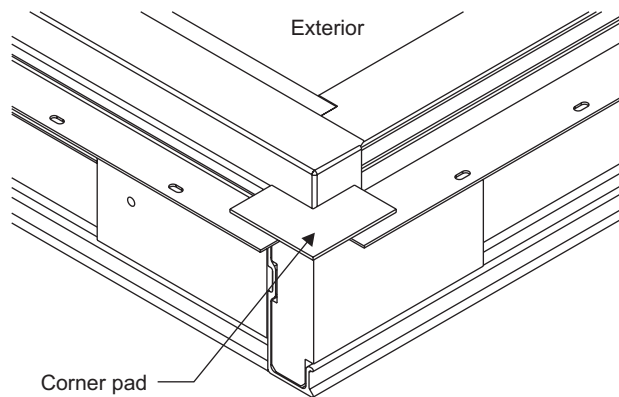
Place head sealing fin on top of drip cap, engaging slot in sealing fin with flange on drip cap.

Staple head sealing fin to each of the anchor blocks in head jamb using 1/2" staples, nails or screws (not provided).



7 APPLY CORNER PADS TO SEALING FIN

Apply corner pads to sealing fins at top corners.

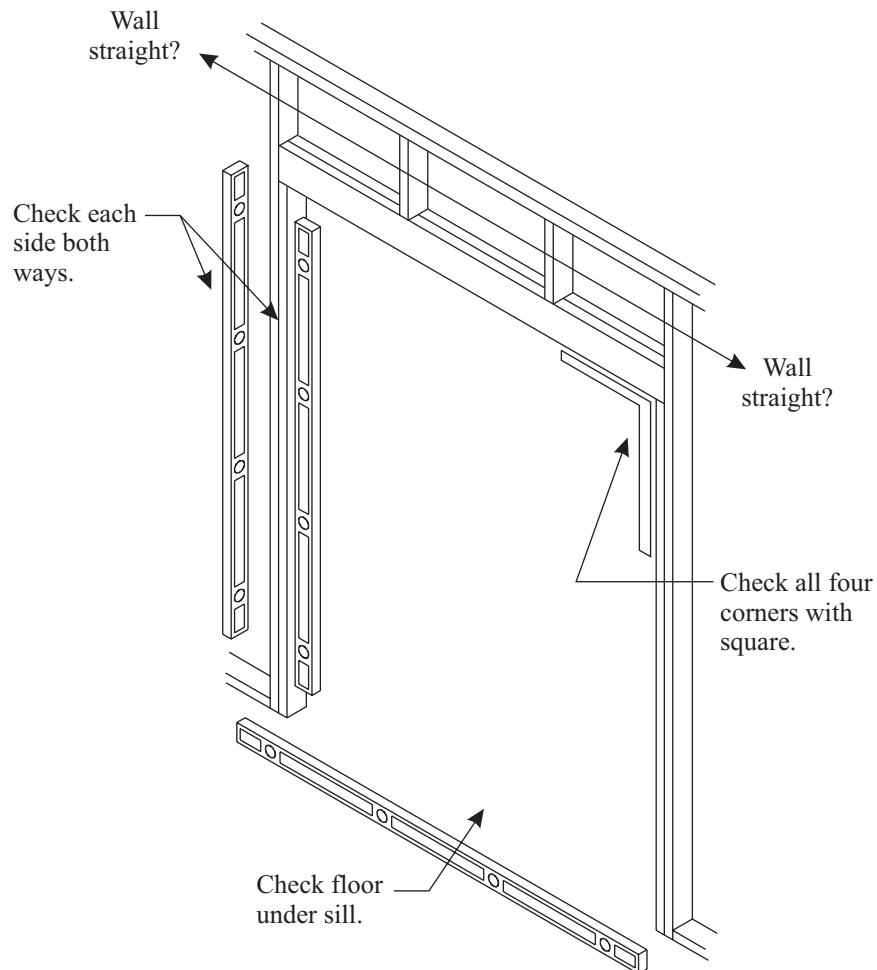


Frame Installation



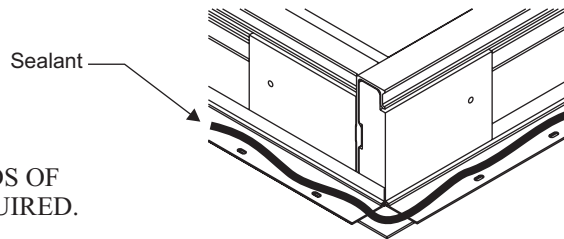
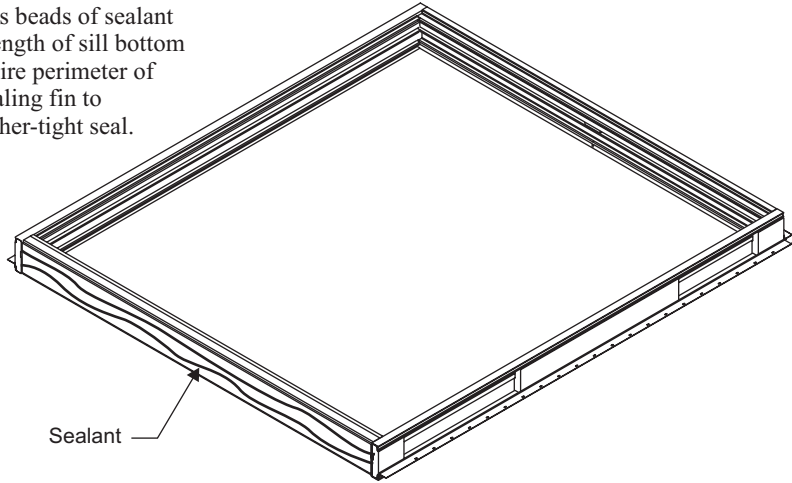
Check rough opening as follows and correct if necessary:

- Sub-floor to be flat, level, and clean. Sill must be supported throughout its entire length.
- All four corners to be square. Check with a framing square.
- Framing and walls to be plumb. Use a 6-foot level to check both sides of opening.
- All wall surfaces to be straight and sides parallel.
- Opening to be correct size. Allow 3/8" on sides and 1/2" at head.



8 APPLY SILICONE SEALANT TO SILL AND FINIS

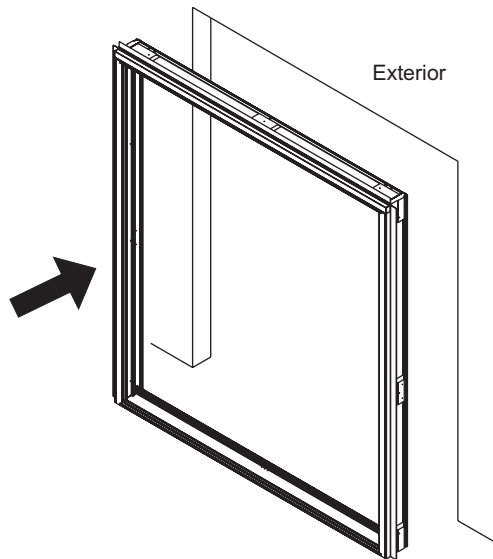
Run continuous beads of sealant across entire length of sill bottom and around entire perimeter of backside of sealing fin to provide a weather-tight seal.



NOTE:
CONTINUOUS BEADS OF
SEALANT ARE REQUIRED.

9 SET UNIT INTO ROUGH OPENING

From outside of house, set system into rough opening. Apply pressure on sill to set sealant.

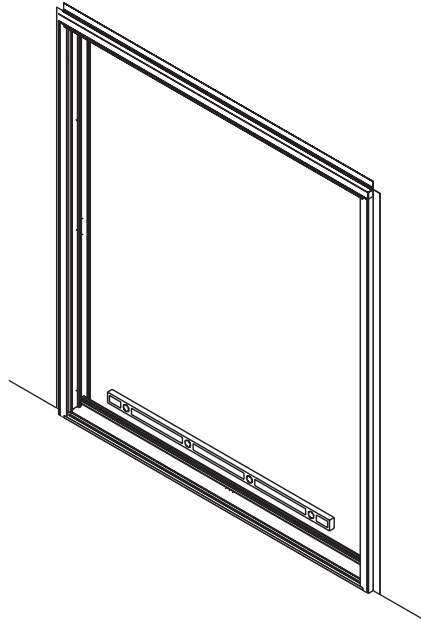


10 LEVEL SILL

Sill **MUST** be flat and level.

Check and make any necessary adjustments.

If necessary, add temporary blocking under projecting exterior edge of sill to serve as support during construction.



11 PLUMB SIDE JAMBS

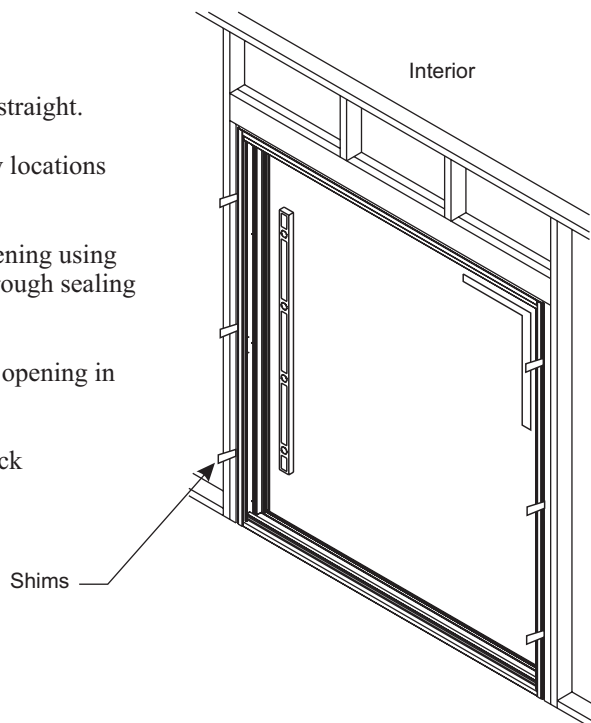
Jambs must be plumb and straight.

Shim as necessary at screw locations to remove any bow.

Fasten system to rough opening using staples, nails, or screws through sealing fin at the corners.

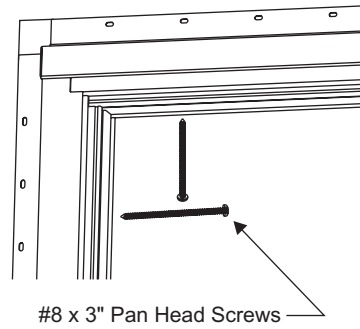
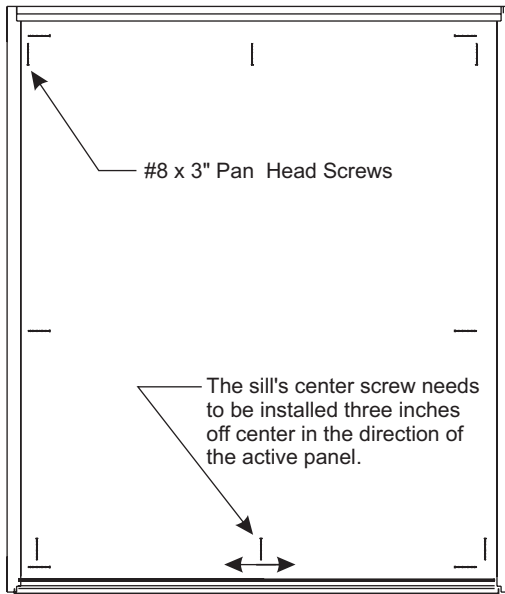
Fasten through every third opening in the sealing fin.

If needed, jambs can be back filled with insulation.

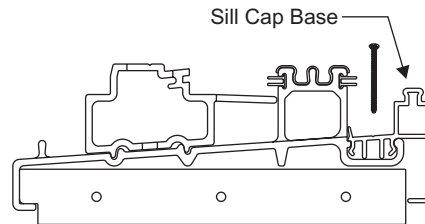


12 SECURE FRAME IN ROUGH OPENING

Using (12) #8 x 3" pan head screws, fasten frame to rough opening through pre-drilled holes in frame.

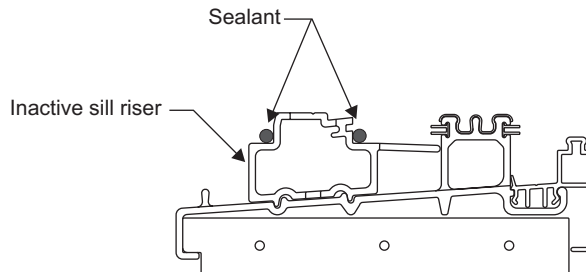


The sill does not have pre-drilled holes. The screws used on the sill are installed through the sill cap base into the sill substrate. There is a v-groove in the sill cap base to assist in aligning the screw.



13 APPLY SEALANT TO INACTIVE DOOR RISER

Apply a 1/4" continuous bead of clear sealant along length of inactive sill riser at locations shown.



14 INSTALL STATIONARY PANEL

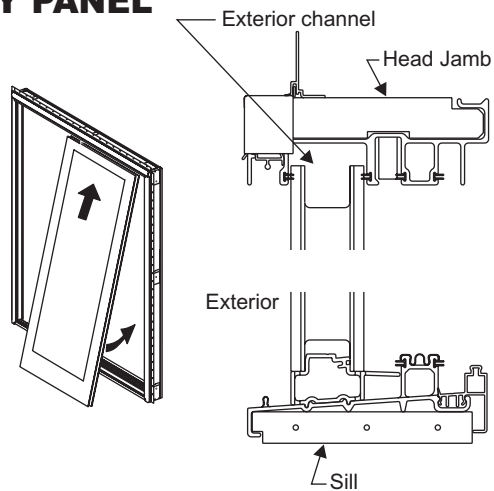
From exterior side of system, install stationary panel by inserting top of panel up into exterior channel in head jamb.

Rotate bottom of panel in until inactive door riser leg sets into groove.

Slide panel tightly against side jamb

Wipe off excess caulking.

As reference, the exterior side of the panel is always the pre-finished side.



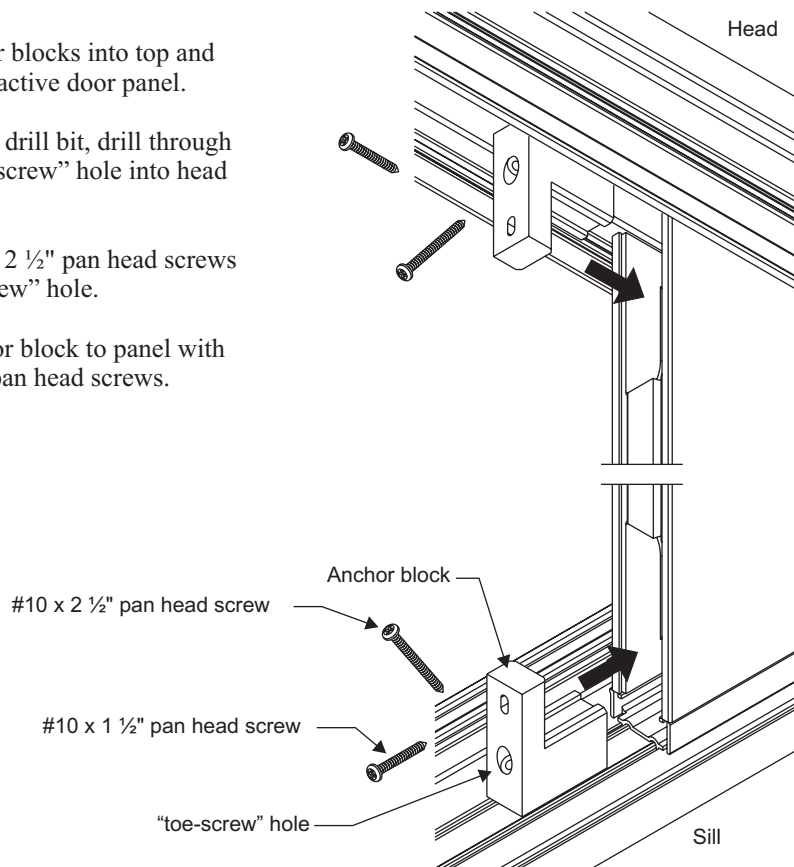
15 INSTALL ANCHOR BLOCKS

Insert anchor blocks into top and bottom of inactive door panel.

Using a 1/8" drill bit, drill through angled "toe-screw" hole into head and sill.

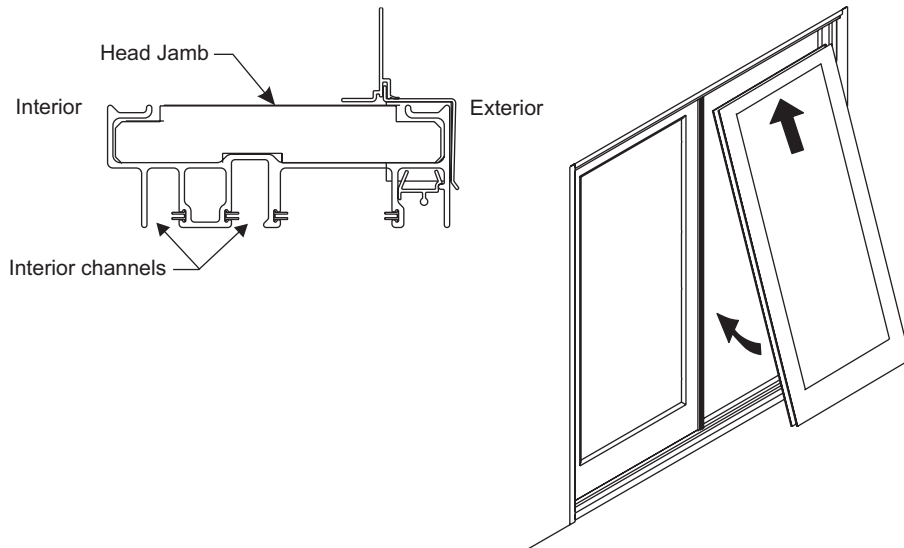
Install #10 x 2 1/2" pan head screws into "toe-screw" hole.

Fasten anchor block to panel with #10 x 1 1/2" pan head screws.



16 INSTALL ACTIVE PANEL

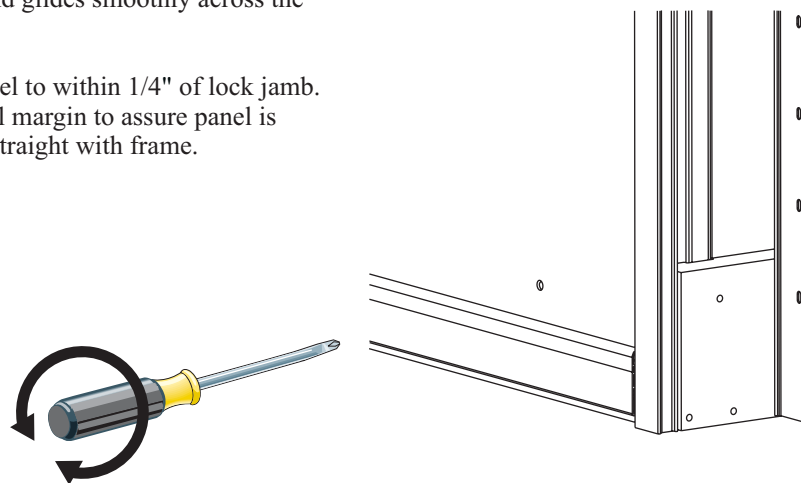
From interior side of system, install active panel up into interior channels in head jamb. Push upwards as far as possible and rotate into place until rollers engage sill roller track.



17 ADJUST ROLLERS

Using a screw driver, turn adjustment screws in rollers left or right until panel is level and glides smoothly across the track.

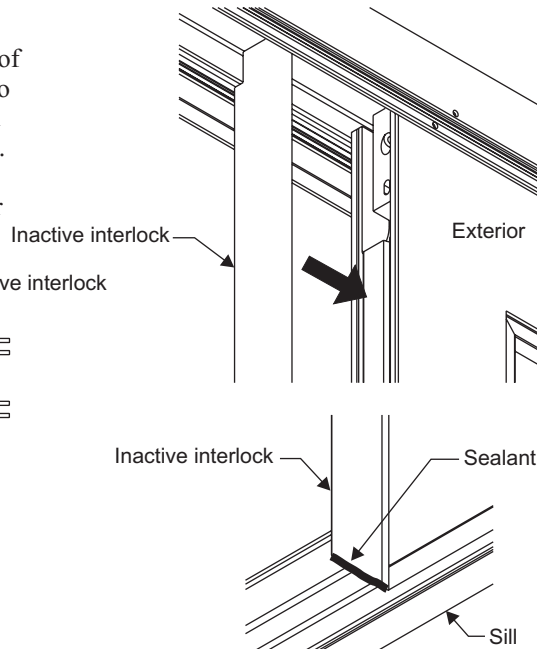
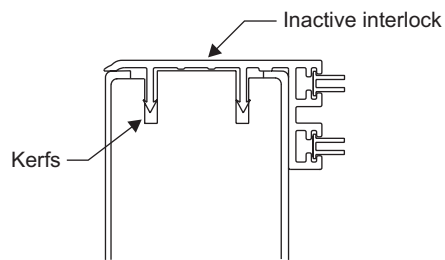
Close panel to within 1/4" of lock jamb. Use visual margin to assure panel is adjusted straight with frame.



18 ATTACH INACTIVE INTERLOCK

Attach inactive interlock to edge of inactive panel by butting it up into head jamb and engaging barbs on interlock with kerfs in door panel.

Use a wood block and hammer or rubber mallet to tap into place.



Apply a bead of sealant along bottom joint of inactive interlock and sill

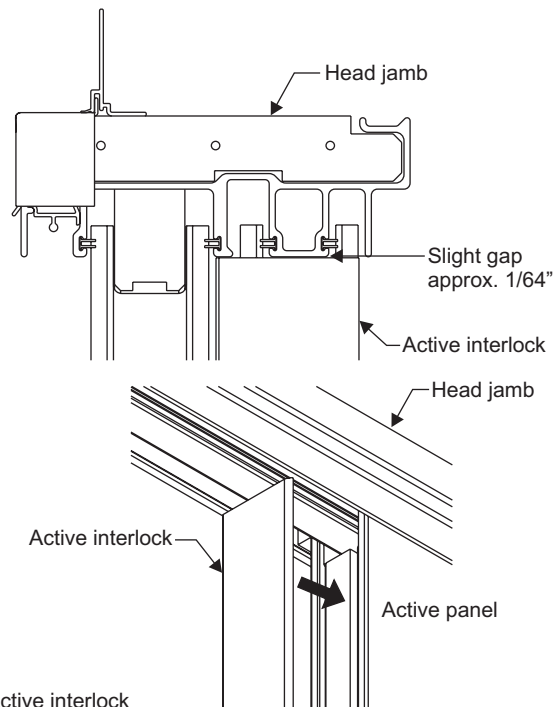
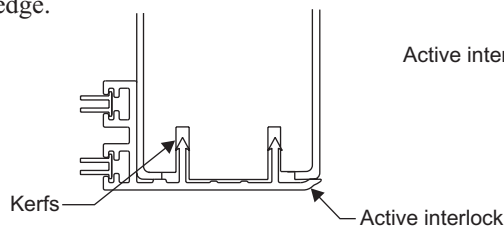
19 INSTALL ACTIVE INTERLOCK

Butt active interlock up against head jamb leaving a slight gap of approximately 1/64" between head jamb and interlock.

Starting at top, insert barbs into kerfs in door edge.

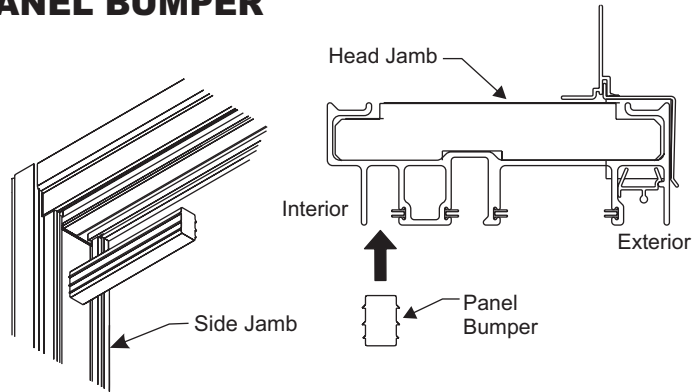
Working your way down, tap in place with a hammer and wood block or rubber mallet.

Carefully inspect interior edge of interlock. Tap as necessary to obtain a tight fit along door edge.



20 INSERT PANEL BUMPER

Insert panel bumper into first channel from interior in head jamb, butting end of bumper against stationary side jamb. Seat panel bumper flush with head jamb.



NOTE:

If needed, bumper can be cut down from its original length of 6" to 4 1/2". This will allow for a wider entrance.

21 HANDLE INSTALLATION

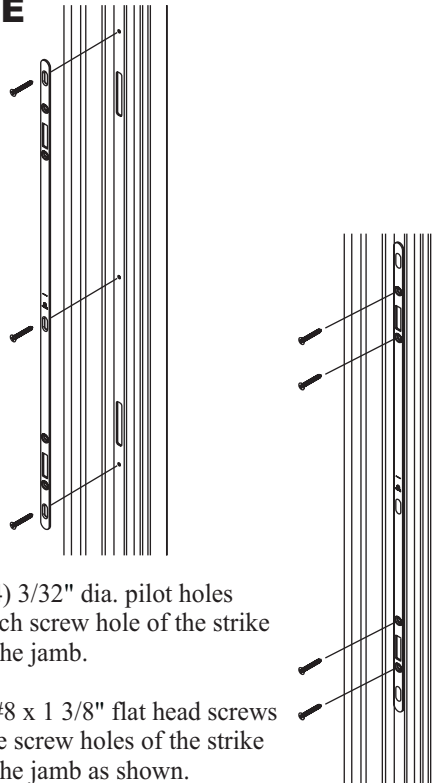
Refer to instructions supplied with handle set kit.

22 ATTACH STRIKE PLATE

Align slots in strike plate to pre-drilled holes in active side jamb and fasten with (3) #8 x 1 3/8" flat head screws.

Close door and adjust strike plate for proper latch engagement.

Latch throw can be adjusted by the slotted adjustment screw on the face of mortise lock.



23 PREP DOOR FOR FOOT BOLT

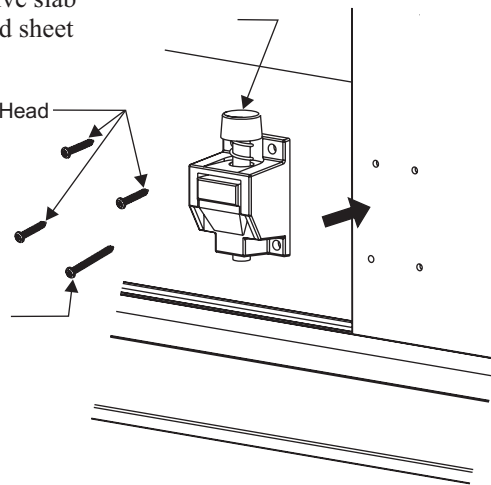
Tear out template on page 16 to locate and drill holes for foot bolt.
Locate template on interior side of active panel towards inactive panel side.
Align line on template with edge of active door panel and tape into place.
Drill 1/8" dia. x 1" deep holes at hole locations shown on template.
Remove template.

24 ATTACH FOOT BOLT

Align foot bolt to pre-drilled holes in active slab and fasten with the supplied S.S. pan head sheet metal screws included with the foot bolt

(3) #8 x 9/16" S.S. Pan Head Sheet Metal Screws

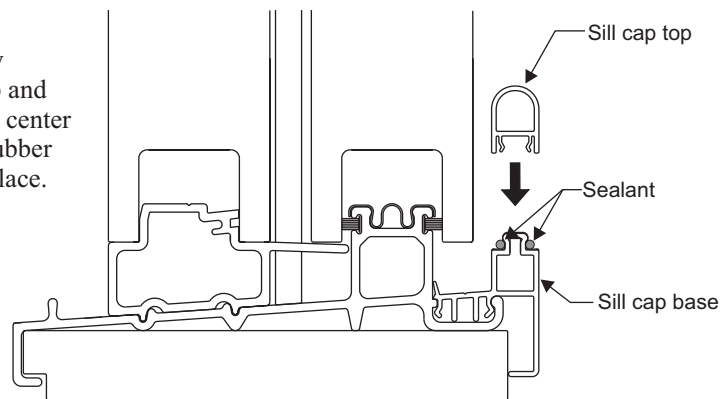
(1) #8 x 1 1/2" S.S. Pan Head Sheet Metal Screw
Locate on bottom right corner of the foot bolt.



25 INSTALL SILL CAP TOP

Place a continuous bead of clear sealant, to locations shown, along entire length of sill cap base.

Install sill cap top by starting at each jamb and working towards the center of the door. Use a rubber mallet to snap into place.



26 INSTALL FOOT BOLT KEEPER

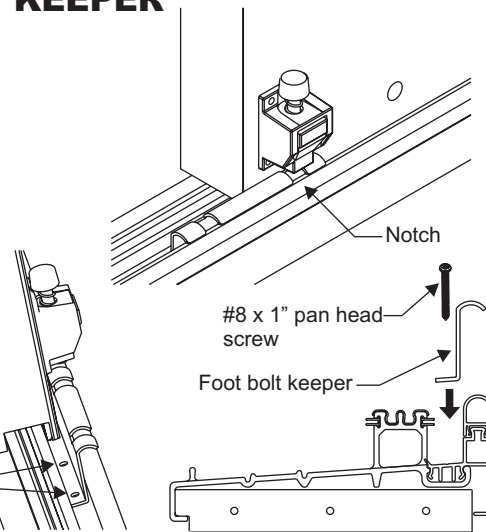
Close the active door completely.

Align notch in keeper with foot bolt as shown.

Only the two exposed holes will be used for installation. Pre-drill using a 1/8" drill bit to drill two holes through the holes in the keeper into the sill cap and through the fiberglass of the sill.

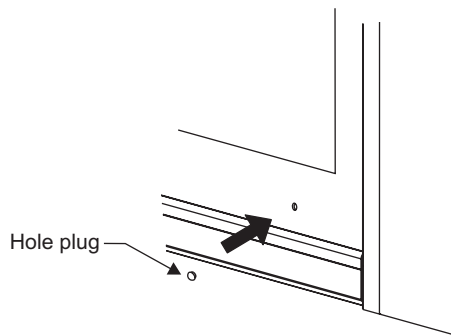
Screw (2) #8 x 1" S.S. Pan head sheet-metal screws into the holes.

Exposed holes



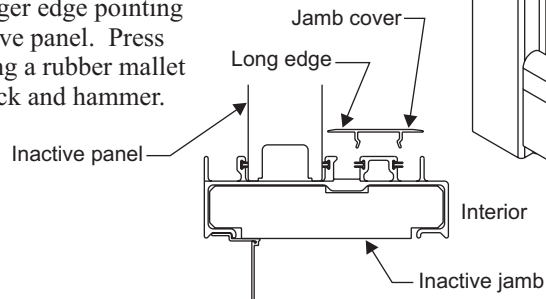
27 INSERT PLUGS

Insert supplied hole plugs into roller adjustment holes.



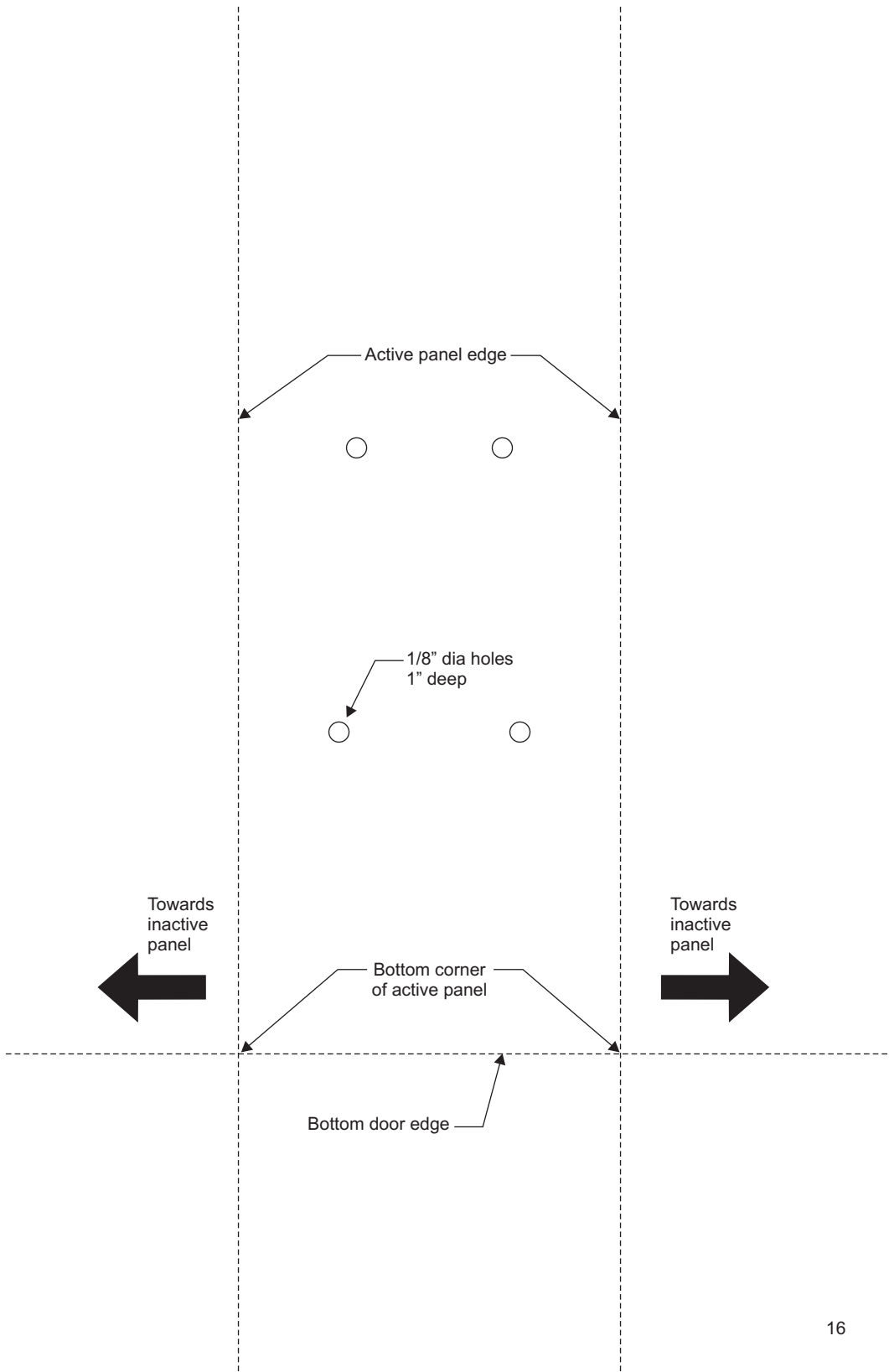
28 ATTACH JAMB COVER

Place jamb cover on inactive jamb with longer edge pointing towards inactive panel. Press into place using a rubber mallet or a wood block and hammer.



29 SLIDING SCREEN DOOR

Refer to instructions supplied with screen door.





FINISHING INSTRUCTIONS

Work only when temperatures are between 50° and 90°F and with humidity less than 85%. Do not finish in direct sunlight.

SMOOTH-STAR® UNITS

Painting Door Interior:

1. Clean first with mild detergent and water or use a TSP (tri-sodium phosphate) solution. Rinse well and allow to dry completely.
2. Mask glass and hardware.
3. Use high-quality acrylic latex house paint, following manufacturer's application instructions.
4. Paint edges and exposed ends of door.

FIBER-CLASSIC® UNITS

Painting Door Interior:

1. Clean first with mild detergent and water or use a TSP (tri-sodium phosphate) solution. Rinse well and allow to dry completely.
2. Mask glass and hardware.
3. Prime with an alkyd- or acrylic-based primer. Allow primer to dry completely.
4. Paint with an oil-based or acrylic latex house paint, following manufacturer's application instructions. Use a primer and paint that are compatible.
5. Paint edges and exposed ends of door.

Staining Door Interior:

We only recommend the use of the stain and clear coat products found in the Therma-Tru Finishing System. (See the Therma-Tru Finishing System instructions for complete details.)

1. Clean first with a clean cloth and mineral spirits and allow to air dry OR wash door with a mild detergent and water, or a TSP (tri-sodium phosphate) solution. Rinse well and allow to dry completely.
2. Mask glass and hardware.
3. Apply stain with a cloth in a circular motion to one section at a time.
4. Wait 5-10 minutes before brushing, depending on the desire for a lighter or darker shade.
5. Brush with the natural bristle brush in the direction of the grain to "feather" or blend the stain to a rich wood look. *Clean brush tips frequently with a dry cloth to remove excess stain.* Stain and brush out each section completely before moving onto next section.
6. Allow a minimum of 48 hours drying time for the stain to cure before applying topcoat.

REPAINTING PROCEDURE

1. Sand the surface to be re-coated with 180 grit sandpaper to abrade and make porous.
2. Remove all sanding dust from the surface. This can be accomplished by using a damp cloth.
3. Optional: Wipe the surface with a solvent paint deglosser applied with a clean cloth followed by a final wipe with an additional clean cloth to ensure the surface is free of any contaminants.
4. Apply Sherwin Williams DTM™ Bonding Primer part # B66A50 to the surface and let the coating dry, following the directions provided on the label located on the back of the can.
5. Topcoat the Sherwin Williams DTM™ Bonding Primer with a high quality acrylic latex coating such as Sherwin Williams SuperPaint™ A84 Series or Sherwin Williams DTM™ Acrylic Coating B66 Series.

For store locations of the above mentioned paints call 1-800-4SHERWIN

Corresponding Sherwin Williams SuperPaint™ Codes:

<u>BRONZE</u>	<u>WHITE</u>	<u>STONE</u>	<u>ALMOND</u>
A89T54	A89W507	A89W53	A89W51
N1 10/32	R2 1/128	B1 9/32	B1 4/32 +1/64
R2 13/32	B1 1/64	W1 10/32	Y3 19/32
W1 39/32	N1 1/64	N1 2Y +46/32	N1 2Y +18/32
B1 6Y +62/32			

WEATHERPROOF, FINISH AND MAINTAIN

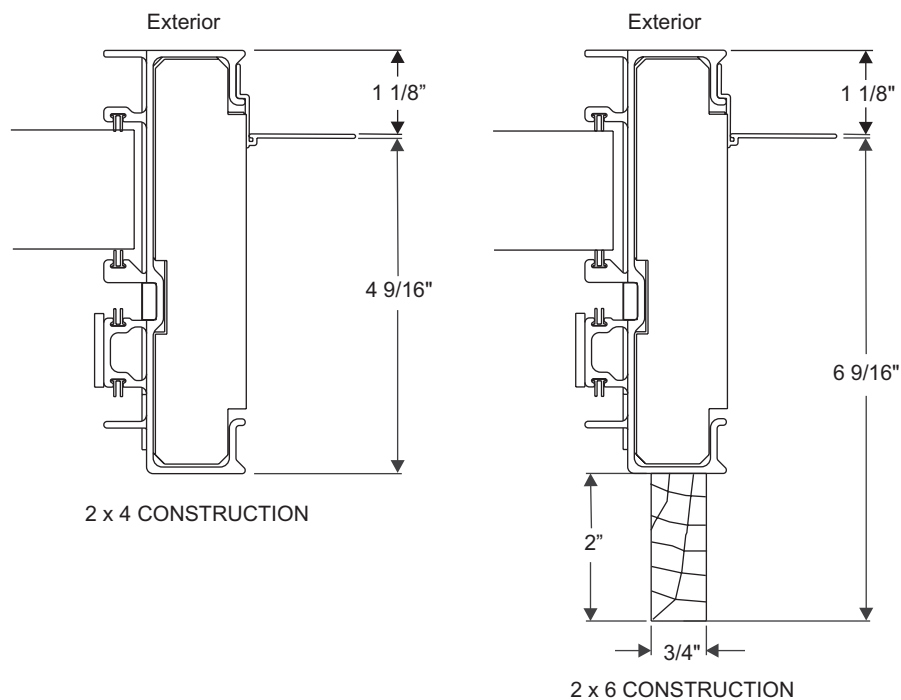
- Add insulation to air space between opening and unit.
- Caulk around entire perimeter of unit on exterior side; seal sealing fins to siding or facing, seal front bottom edge of sill, seal all joints between jamb and mouldings.
- Seal joints between exterior hardware trim and door face to prevent air and water infiltration.
- Paint or stain according to Therma-Tru instructions. Do not paint gaskets or weatherstrip.
- Maintain or replace sealants and finishes as soon as any deterioration is evident. For semi-gloss or glossy paints or clear coats, do this when surface becomes dull or rough. More severe exposures require more frequent maintenance.
- All Therma-Tru doors must be finished and maintained in accordance with our recommendations. Failure to do so may affect the applicable warranty.
- Remove sill tape and labels on glass.
- Use touch-up paint to paint heads of rough opening screws

JAMB EXTENSION INFORMATION

The following images are intended to help clarify how a patio door is installed in different frame openings.

The jamb extensions are made of standard wood trim materials, readily available from lumber yards and building material retail stores.

Attach the jamb extensions through the side into the wall.

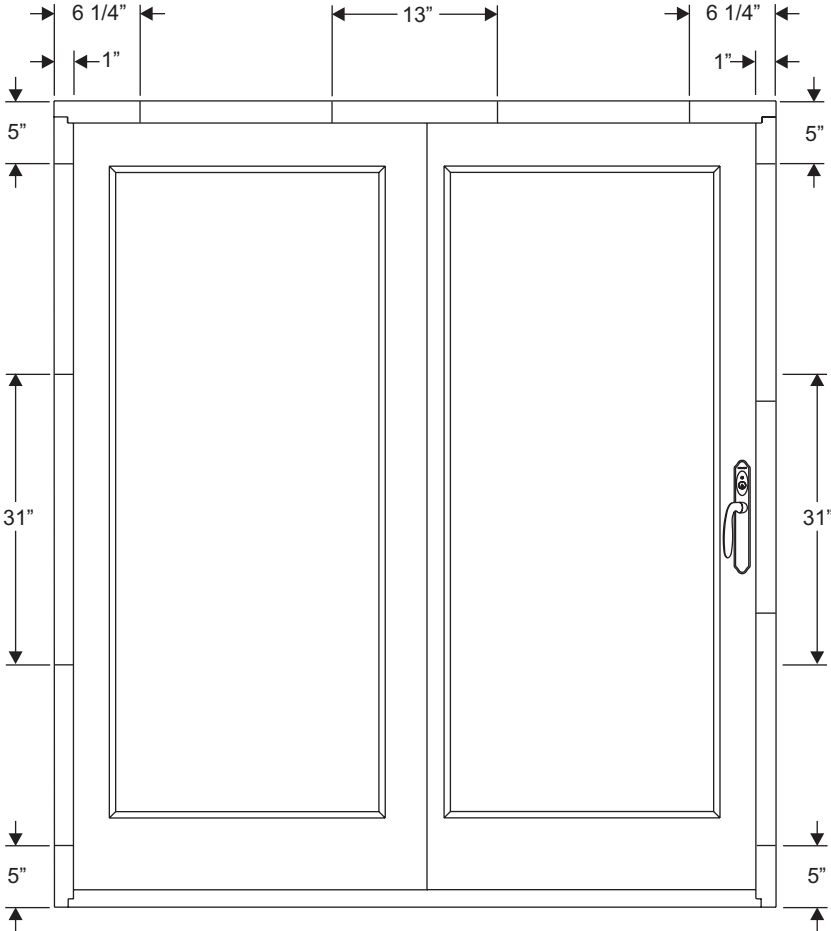


INTERIOR CASING ATTACHMENT

Interior casing may be attached to the frame in either of the following ways:

An air nailer can be used to fasten the interior casing to the frame using 0.050" x 1-1/2" wire brad nails through the casing and fiberglass frame. For maximum holding power, ensure that nails are installed through anchor blocks located within frame profiles. Locations are shown below for standard two-panel systems.

For manual application, we suggest using 4d-1-1/2" finish nails. They can be used to secure interior casing to the frame. Pre-drilled pilot holes (1/16" dia.) are recommended to avoid splitting casing or frame. Ensure that nails are installed through anchor blocks for maximum holding power.



SIZING INFORMATION

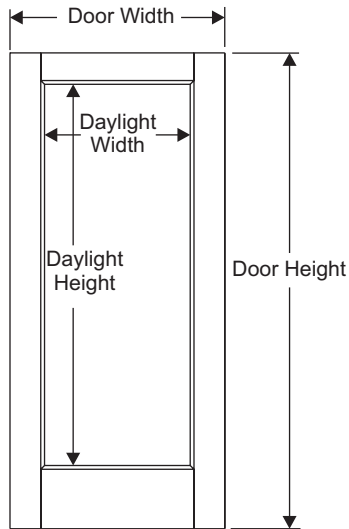
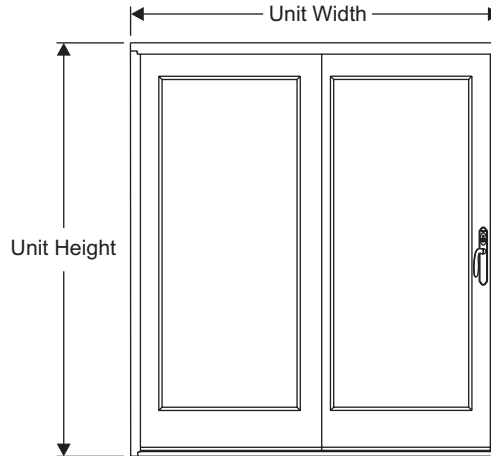
Therma-Tru Fiber-Classic/Smooth-Star Sliding Patio Specifications

Description	Configuration	Unit Size		Rough Opening		Grids
		Width	Height	Width	Height	# of Lites
5/0 x R.H.	XO or OX	59 1/4	79 1/2	60	80	10 or 15
6/0 x R.H.	XO or OX	71 1/4	79 1/2	72	80	10 or 15

5/0 x F.H.	XO or OX	59 1/4	82	60	82 1/2	10 or 15
6/0 x F.H.	XO or OX	71 1/4	82	72	82 1/2	10 or 15

5/0 x 8/0	XO or OX	59 1/4	95 1/2	60	96	12 or 18
6/0 x 8/0	XO or OX	71 1/4	95 1/2	72	96	12 or 18

R.H. Replacement Height
 F.H. Full Height
 8/0 8' Height
 X Active Door
 O Inactive Door



Door Panel Information

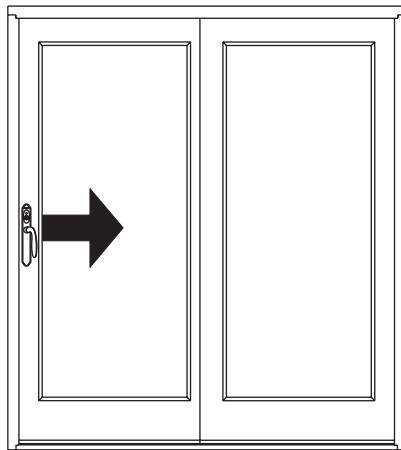
Fiber-Classic	Door Size		Daylight Opening	
	Width	Height	Width	Height
2/6 x R.H.	29 1/2	76 3/16	20	63 1/8
2/6 x F.H.	29 1/2	78 11/16	20	63 1/8
2/6 x 8/0	29 1/2	92 3/16	19 13/16	78 13/16

3/0 x R.H.	35 1/2	76 3/16	26	63 1/8
3/0 x F.H.	35 1/2	78 11/16	26	63 1/8
3/0 x 8/0	35 1/2	92 3/16	23 13/16	78 13/16

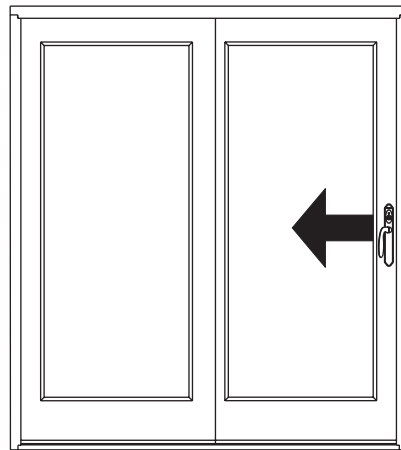
Smooth-Star	Door Size		Daylight Opening	
	Width	Height	Width	Height
2/6 x R.H.	29 9/16	76 3/16	20	63 1/8
2/6 x F.H.	29 9/16	78 11/16	20	63 1/8
2/6 x 8/0	29 9/16	92 3/16	19 13/16	78 13/16

3/0 x R.H.	35 9/16	76 3/16	24 1/8	63 1/8
3/0 x F.H.	35 9/16	78 11/16	24 1/8	63 1/8
3/0 x 8/0	35 9/16	92 3/16	23 13/16	78 13/16

DOOR HANDING GUIDE



Left Hand



Right Hand

Viewed from exterior

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